REMARKS

This response is intended as a full and complete response to the non-final Office Action mailed March 20, 2006. In the Office Action, the Examiner notes that claims 1-9 and 14-17 are pending and rejected. By this response, Applicant has herein amended claims 2-3, and 7-8. No new matter has been entered.

In view of both the amendments presented above and the following discussion, Applicant submits that none of the claims now pending in the application are obvious under the provisions of 35 U.S.C. §103. Thus, Applicant believes that all of the pending claims are now in allowable form.

It is to be understood that Applicant, by amending the claims, does not acquiesce to the Examiner's characterizations of the art of record or to Applicant's subject matter recited in the pending claims. Further, Applicant is not acquiescing to the Examiner's statements as to the applicability of the art of record to the pending claims by filing the instant responsive amendments.

REJECTIONS

35 U.S.C. §103

Claims 1-9 and 15-17

The Examiner has rejected claims 1-3, 5-9 and 14-17 as being obvious and unpatentable under the provisions of 35 U.S.C. §103(a). In particular, the Examiner has rejected claims 1-3, 5-9 and 14-17 as being unpatentable over Kannas et al. (U.S. Patent No. 6,683,853 B1, hereinafter "Kannas") in view of Rinne (U.S. Patent No. 6,845,100, hereinafter "Rinne"). Applicant respectfully traverses the rejection.

In general, Kannas teaches a system for allocating system resources to provide a selected quality of service in connection with data communications. As taught in Kannas, a mobile user station requests a first quality of service level and, in response to a determination that system resources for providing the first quality of service level are not available, the system assigns resources for providing a second quality of service level. The system monitors the availability of system resources and if system resources for providing the second quality of service level become available, the system allocates

resources to support the first quality of service level. (Kannas, Abstract). Kannas, however, fails to teach or suggest Applicant's invention of at least claim 1, as a whole.

Applicant agrees that, as stated by the Examiner, Kannas fails to teach or suggest preferred ones of traffic classes in a priority order. Furthermore, Kannas must also fail to teach or suggest a request including a quality of service information element having at least one traffic class field for conveying a request for the preferred ones of traffic classes in the priority order. Thus, Kannas fails to teach or suggest Applicant's invention as a whole. Moreover, Rinne fails to bridge the substantial gap as between Kannas and Applicant's invention of at least claim 1.

In general, Rinne teaches quality of service (QOS) mechanisms for wireless transmission of IP traffic. In particular, IP packets classified according to QOS are mapped onto radio bearers according to various mechanisms. As taught in Rinne, packets arriving at or leaving from a first network are checked to see if an indicated QOS has been achieved in transit before arriving and leaving and, if not, degrading the QOS actually allocated accordingly for purposes of further transmission. Rinne, however, alone or in combination with Kannas, fails to teach or suggest Applicant's invention as a whole. Namely, Rinne fails to teach or suggest a quality of service information element having at least one traffic class field for conveying the request for preferred ones of traffic classes in said priority order, as taught in Applicant's invention of at least claim 1.

In the Office Action, the Examiner cites the traffic class-protocol field taught in Rinne for teaching the quality of service information element of Applicant's invention. The traffic class-protocol field taught in Rinne, however, is merely a field by which the priority of each packet may be specified for use in prioritizing transmission of packets. As taught in Rinne, the traffic class-protocol field provides two levels of prioritization. The traffic class-protocol field enables packets to first be prioritized according to a QoS class. The traffic class-protocol field further enables prioritization of packets within each of the QoS classes using respective ranges of traffic class values associated with each QoS class. More specifically, as taught in Rinne, the traffic class-protocol field is divided into 5 QoS classes, where each QoS class includes a range of traffic class values. For example, QoS Class 1 includes five traffic class levels (10 – 14), where traffic class

level 10 is the highest priority in QoS Class 1 and traffic class level 14 is the lowest priority in QoS Class 1.

In particular, Rinne specifically states "[s]till under each flow of packets belonging to a given QoS class, there can be some QoS differentiation on a packet-by packet basis, such as: QoS Subclass (i,j), e.g., (2,18) is typically QoS Class 2, with traffic class value 18. However, when packets appear with QoS class 2, with traffic class value 15, it will get higher scheduling privileges in the Radio Interface Layer 2." (Rinne, Col. 8, Lines 17-24, Emphasis added). In other words, Rinne merely teaches a field which is used to assign a priority to an individual packet for use in scheduling the transmission of that individual packet. As such, a traffic class-protocol field for assigning a priority level to a packet, as taught in Rinne, simply does not teach or suggest a traffic class field for conveying a request for preferred ones of traffic classes in a priority order, as taught in Applicant's invention of at least claim 1.

Applicant's invention provides a quality of service information element including at least one traffic class field for conveying a request for preferred ones of traffic classes in a priority order. In other words, Applicant's invention enables a mobile station, using one transaction with the associated wireless data network, to convey a priority order of different traffic classes with which the wireless data network should attempt to provide service to the mobile station. For example, the at least one traffic class field of Applicant's invention may include a code indicating that the mobile station should first try to provide service using a streaming-quality traffic class, and, if service cannot be provided using the streaming-quality traffic class, the mobile station should then try to provide service using an interactive-quality traffic class. As taught in Applicant's specification, any number of preferred traffic classes may be conveyed by the quality of service information element in any priority order.

Applicant respectfully submits that the quality of service information element of Applicant's invention may be better understood with respect to Figure 4 of Applicant's application (which depicts a quality of service information element having at least one traffic class field) and Figure 5 of Applicant's application (which depicts examples of codes adapted for conveying preferred ones of traffic classes in a priority order). Furthermore, Applicant's specification, in support of at least the quality of service

information element including the at least one traffic class field, as taught in Applicant's claim 1, states:

> "The selection of particular traffic classes (or alternatives) is, e.g., performed by the user in initiating a request. For example, if a user subscribes to a service that supports either streaming (at a higher cost) or interactive (at a lower cost), the user can specify which one to try for first by, e.g., setting a predefined field on a service profile, or preferences, screen (not shown) in the MS. When the MS subsequently performs the PDP context activation procedure (e.g., upon power-up of the MS if the service profile defines immediate registration upon power up), the D bit is set and the appropriate traffic class value is inserted in QoS IE 400 to specify, e.g., requesting a streaming traffic class first then (if streaming is not available) an interactive traffic class."
> (Specification, Pg. 7, Lines 6-14, Emphasis added).

By contrast, as described herein, Rinne merely teaches that each packet may be assigned a priority level using a priority field. Furthermore, other portions of Rinne cited by the Examiner merely state that a QoS scheduler determines the assigned priority levels of the packets and allocates capacity for transmission of the packets according to the assigned priority levels. In other words, Rinne merely teaches a field by which packets may be assigned a priority level which may be used to schedule transmission of the packets. A field used to assign a priority level to a packet, as taught in Rinne, simply does not teach or suggest a quality of service information element having at least one traffic class field for conveying a request for preferred ones of traffic classes in a priority order from a mobile station to a wireless data network, as taught in Applicant's invention of at least claim 1. Furthermore, Rinne is completely devoid of any teaching or suggestion of specifying preferred ones of traffic classes in a priority order, as taught in Applicant's invention of at least claim 1.

As such, since Kannas and Rinne both fail to teach or suggest a quality of service information element having at least one traffic class field for conveying the request for preferred ones of traffic classes in a priority order, Applicant respectfully submits that no conceivable combination of Kannas and Rinne could teach a quality of service information element having at least one traffic class field for conveying the

request for preferred ones of traffic classes in a priority order, as taught in Applicant's invention of at least claim 1.

Furthermore, Applicant submits that even if the Kannas and Rinne references could be combined, they would merely teach a system in which a mobile station is assigned a quality of service level as taught in Kannas, and each packet associated with that mobile station is prioritized for transmission using the traffic class-protocol field as taught in Rinne. In other words, if multiple mobile stations are assigned a quality of service level corresponding to QoS class 2 taught in Rinne, transmission of packets for each of those multiple mobile stations may be further prioritized using the traffic class value associated with QoS class 2 (i.e., 15 – 19). As such, Applicant submits that even if the Kannas and Rinne references could be combined, the resulting system would still fail to teach or suggest Applicant's invention of at least claim 1, as a whole.

The test under 35 U.S.C. §103 is not whether an improvement or a use set forth in a patent would have been obvious or non-obvious; rather the test is whether the claimed invention, considered as a whole, would have been obvious. Jones v. Hardy, 110 USPQ 1021, 1024 (Fed. Cir. 1984) (emphasis added). Moreover, the invention as a whole is not restricted to the specific subject matter claimed, but also embraces its properties and the problem it solves. In re Wright, 6 USPQ 2d 1959, 1961 (Fed. Cir. 1988) (emphasis added). For at least the reasons described herein, the Kannas and Rinne references, alone or in combination, fail to teach or suggest Applicant's invention of at least claim 1, as a whole.

As such, for at least the reasons stated above, the Applicant respectfully submits that independent claim 1 is not obvious and fully satisfies the requirements of 35 U.S.C. §103 and is patentable thereunder. Furthermore, independent claims 6, 15, and 16 recite limitations substantially similar to relevant limitations of independent claim 1. Therefore, for at least the reasons discussed above with respect to claim 1, Applicant respectfully submits that independent claims 6, 14, 15, and 16 are also not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder.

As such, Applicant submits that independent claims 1, 6, 14, 15 and 16 are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Furthermore, claims 2-3, 5, 7-9 and 17 depend directly from independent

claims 1, 6 and 16, and recite additional limitations thereof. Therefore, for at least the same reasons set forth above, Applicant submits that these dependent claims are not obvious and fully satisfy the requirements of 35 U.S.C. §103 and are patentable thereunder. Therefore, Applicant respectfully requests that the Examiner's rejections be withdrawn.

SECONDARY REFERENCES

The secondary references made of record are noted. However, it is believed that the secondary references are no more pertinent to Applicant's disclosure than the primary references cited in the Office Action. Therefore, Applicant believes that a detailed discussion of the secondary references is not necessary for a full and complete response to this office action.

CONCLUSION

Thus, Applicant submits that none of the claims presently in the application are obvious under the provisions of 35 U.S.C. §103. Accordingly, both reconsideration of this application and its swift passage to issue are earnestly solicited.

If, however, the Examiner believes that there are any unresolved issues requiring adverse final action in any of the claims now pending in the application, it is requested that the Examiner telephone Michael Bentley at (732) 383-1434 or Eamon J. Wall, Esq. at (732) 530-9404 so that appropriate arrangements can be made for resolving such issues as expeditiously as possible.

Respectfully submitted,

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